

WHAT IS CLAIMED IS:

1. A system combining a pager type personal digital assistant and a mobile phone module comprising:
 - a pager for real-time receiving data from a broadcasting system in whole day;
 - a central processing unit integrating with a pager, a personal digital assistant and a GSM / DCS system and having a function of controlling;
 - a personal digital assistant unit for displaying received data and making a selection responsive to the received data;
 - a GSM / DCS integrating circuit for controlling operations of components of a mobile phone; and
 - a communication interface having two frequency channels for bidirectionally transmitting speech and data signals and then transmitting signals through GSM or DCS channels;
- 15 wherein by above structure, a pager type personal digital assistant and a mobile phone module are integrated as an integral device; **therefore, a** space occupied is reduced and the integrated device is portable, users **operate** the system at any time and place; data and speech can be transferred bidirectionally through three channels; and data propagation can be realized in time.
- 20 2. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein a speaker is installed at a selected position of the system.
- 25 3. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein the personal digital assistant includes an infrared port, a key platform, a liquid crystal display, a memory, a security device.
4. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 3, wherein the key platform includes a

plurality of directional keys, an input key, and an electrostatic sensing pen.

5. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein the mobile phone includes a memory, a subscriber identity module, a speaker / microphone, a hand free receiver.

6. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 5, wherein the speaker is utilized in a receiver of the mobile phone.

7. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 5, wherein the microphone is utilized in a transmitter of the mobile phone.

8. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 5, wherein the subscriber identity module is a metal chip card storing the phone number of the mobile phone, a program for actuating the mobile phone, and having a plurality of memory space.

9. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 5 wherein the communication interface includes an analog / digital converting circuit, a digital / analog converting circuit, a GSM / DCS channel selecting circuit, and an antenna.

10. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein the GSM / DCS mobile phone system is actuated by an independent power switch.

11. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein the three channels are a channel of the pager, a channel of GSM system and a channel of DCS channel.

12. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein a receiving frequency of the pager is 285 ~ 1375 MHz.

13. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 10 , wherein a transmitting frequency of the GSM system is 880 ~ 915 MHz and a receiving frequency thereof is 925 ~ 960 MHz.

5 14. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 10, wherein a transmitting frequency of the DCS system is 1710 ~ 1785 MHz and a receiving frequency thereof is 1805 ~ 1880 MHz.

10 15. The system combining a pager type personal digital assistant and a mobile phone module as claimed in claim 1, wherein data is sent by a wireless application protocol as a standard of bidirectional data transmission.

16. A method for a system combining a pager type personal digital assistant and a mobile phone module comprising the steps of:

starting (step 41);

15 turning on the power (step 411);

actuating a personal digital assistant (step 412);

pager in the personal digital assistant receiving a message from a broadcast system (step 413);

determining whether the system is operated in normal (step 414);

20 if not, returning the process back to step 412; if yes, actuating the GSM / DCS power (step 42);

performing a speech selecting process (step 421);

performing an idle mode process (step 422);

performing a connection process (step 423);

25 performing a connection and conversion process (step 424) and a continuous releasing process (425);

determining whether the work is performed in normal (step 426);

if no, the process returning to (step 421); if yes, the GSM/ DCS is accomplished (step 43); and
actuating a normal condition (step 44);
ending (step 45).